



Still More Checkers

by Arya Akhavan (March 2015)

Angles for R.I. = 1.500

73 + 20 girdles = 93 facets

4-fold, mirror-image symmetry

96 index

L/W = 1.000 T/W = 0.165 U/W = 0.165

P/W = 0.481 C/W = 0.231

Vol./W³ = 0.267

PAVILION

P1	44.17°	96-24-48-72	Cut to centerpoint.
P2	43.81°	03-21-27-45- 51-69-75-93	Meet at culet.
P3	43.00°	05-19-29-43- 53-67-77-91	Meet at culet.
G1	90.00°	96-24-48-72	Set stone size.
G2	90.00°	03-21-27-45- 51-69-75-93	Level girdle.
G3	90.00°	05-19-29-43- 53-67-77-91	Level girdle.
P4	43.51°	02-22-26-46- 50-70-74-94	Meet P1, P2, G1, G2

CROWN

C1	52.27°	96-24-48-72	Set girdle width.
C2	52.80°	03-21-27-45- 51-69-75-93	Level girdle.
C3	54.17°	05-19-29-43- 53-67-77-91	Level girdle.
C4	32.20°	12-36-60-84	Meet G3, C3
C5	27.21°	08-16-32-40- 56-64-80-88	Meet C2, C3, C4
C6	24.00°	96-24-48-72	Meet C1, C2, C5
C7	19.98°	12-36-60-84	Meet C4, C5
C8	14.42°	96-24-48-72	Meet C5, C6, C7
T	0.00°	Table	Meet C7, C8

I can't believe that I hadn't written a 5x5 square checkerboard before. Sure, I've done some things with 5x5 checkerboards in them, but not a pure checkerboard by itself. I tried to make this as even of a dome as possible. If you really want, you can re-write the pavilion as a pseudo-barion. Works in materials from petalite to CZ (RI = 1.50 - 2.16) with no changes. For dark garnets, make the pavilion even shallower and it should work.

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